UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,885	10/07/2003	Geoffrey Frank Deane	INOGN.005A 6432	
20995 KNORRF MA	7590 02/08/200 RTENS OLSON & BE	EXAMINER		
2040 MAIN STREET			PATEL, NIHIR B	
FOURTEENTH FLOOR IRVINE, CA 92614			ART UNIT	PAPER NUMBER
			3772	
	•			
			NOTIFICATION DATE	DELIVERY MODE
			02/08/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com eOAPilot@kmob.com

	Application No.	Applicant(s)				
·	10/680,885	DEANE ET AL.				
. Office Action Summary	Examiner	Art Unit				
	Nihir Patel	3772				
The MAILING DATE of this communication app	ears on the cover sheet with the o	correspondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION B6(a). In no event, however, may a reply be tir rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 11.06	<u>5.2007</u> .					
,—	$^{\prime}$					
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
closed in accordance with the practice under E	х рапе Quayle, 1935 С.D. 11, 49	03 U.G. 213.				
Disposition of Claims	·					
4) Claim(s) 4-8.20 and 21 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) <u>4-8, 20 and 21</u> is/are rejected. 7) Claim(s) is/are objected to.	6) Claim(s) 4-8, 20 and 21 is/are rejected.					
8) Claim(s) are subject to restriction and/or	r election requirement.					
o, in commence and conjugation commence and conjugation conjugatio						
Application Papers						
9) The specification is objected to by the Examine						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
,						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received.						
 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail D 5) Notice of Informal I					
Paper No(s)/Mail Date	6) Other:					

Application/Control Number:

10/680,885 Art Unit: 3772

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims **20 and 21** is withdrawn in view of the newly discovered reference(s). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 4. Claims 4-8, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCombs et al. (US 6,764,534) in view of Botti et al. (US 6,609,582).
- 5. As to claim 20, McCombs substantially discloses an apparatus that comprises a compressor 24 which produces a feed gas; plural adsorbent beds 30 and 32 connected to receive the feed gas and produce a purified gas and a waste gas from the feed gas (see figures 1, 4, 7 and 8; column 3 lines 18-40); a battery (see column 5 lines 1-10); a conduit connected to deliver the waste gas to the battery to cool the battery (see column 5 lines 9-25); and wherein the

10/680,885

Art Unit: 3772

between the battery and the battery compartment (see column 5 lines 9-25), but does not teach a battery compartment that comprises a thermal sleeve positioned around the battery. Botti teaches an apparatus that does provide a battery compartment that comprises a thermal sleeve positioned around the battery (see column 10 lines 15-25). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify McComb's invention by providing a battery compartment that comprises a thermal sleeve positioned around the battery as taught by Botti in order to prolong the life of the battery.

6. As to claim 4, McCombs substantially discloses an apparatus that comprises a housing 104 and 106 which comprises an ambient air inlet 21, an ambient air outlet 30b and 32b, and plural compartments (the two compartments are separated by a central chassis 108), a first of which contains the adsorbent beds and a second of which contains the compressor (see figures 7 and 8), the compartments significantly inhibit migration of thermal energy from the second compartment to the first compartment, wherein the housing further comprises a circuitous air passageway through which the air is directed to flow, the air passageway having an upstream portion and a downstream portion (see column 3 lines 15-45); and an air circulation fan which draws air through the inlet into the first compartment and through the first compartment into the second compartment, the air being exhausted through the outlet (see column 4 lines 45-65), wherein the upstream portion of the air passageway is positioned adjacent the first compartment and the downstream portion of the air passageway is positioned adjacent the second compartment (see figures 7 and 8).

Application/Control Number:

10/680,885

Art Unit: 3772

7. **As to claim 5**, McCombs substantially discloses an apparatus wherein the first compartment contains heat sensitive components including a plurality of valves interconnected to the adsorbent beds and a circuit board having control circuitry which governs the operation of the valves (see figures 1-8 and column 3 lines 8-17 and 40-55).

Page 4

- 8. **As to claim 6,** McCombs substantially discloses an apparatus wherein air in the downstream portion of the air passageway is substantially inhibited from flowing into the upstream portion (see column 3 lines 25-40).
- 9. As to claim 7, McCombs substantially discloses the claimed invention; see rejection of claim 20 above, but does not disclose plurality of sound absorbing baffles positioned along at least a portion of the air passageway. It would have been an obvious matter of design choice to provide plurality of sound absorbing baffles positioned along at least a portion of the air passageway in order to reduce noise level, since the applicant has not disclosed that having plurality of sound absorbing baffles positioned along at least a portion of the air passageway solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with intake resonator as indicated by McCombs (see column 3 lines 10-20).
- 10. **As to claim 8,** McCombs substantially discloses an apparatus wherein the fan is positioned directly above the compressor and produces an air stream directly against the compressor (see figures 7 and 8).
- 11. **As to claim 11,** McCombs substantially discloses an apparatus wherein the waste gas comprises a nitrogen rich gas (see column 2 lines 55-67).

10/680.885

Art Unit: 3772

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nihir Patel whose telephone number is (571) 272-4803. The examiner can normally be reached on 7:30 to 4:30 every other Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit 3772

Nihir Patel